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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,188	03/28/2001	Thomas Michael Gooding	ROC920010087US1	2894

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EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

5

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,188

Applicant(s)

GOODING, THOMAS MICHAEL

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-15,17-21,23-31,33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-15,17-21,23-31,33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to amendment A filed December 23, 2003. Claims 1-4, 6-15, 17-21, 23-31, and 33-34 remain in this application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4, 6-15, 17-21, 23-31, and 33-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
4. Specification does not explicitly describe nor is sufficiently clear for one of ordinary skill in art to recognize the following steps as recited in claims 1-4, 6-15, 17-21, 23-31, and 33-34:
 - **optimizing** the pure value buffer
 - **transmitting the optimized pure value buffer** to the remote node
 - **eliminating remote node write only-type data** from the pure value buffer
 - **eliminating local node read only-type data** from the pure value buffer

- **eliminating second node write only-type data** from the pure value buffer
- **removing local node read only-type data** from the pure value buffer

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10 and 27 are rejected under 35 U.S.C. 112; second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The limitations “return pure value buffer” in claim 10 (line 2) and claim 27 (line 2) are vague and indefinite. It is not clear which *return pure value buffer* is referred to? Does applicant intend to mean – *the return pure value buffer*?

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4, 6-15, 17-21, 23-31, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Leach et al.** (U.S. 6, 108,715) in view of **Russell et al.** (U.S. 5, 617,570).

10. **As to claim 1**, Leach teaches the invention substantially as claimed including a method for transmitting local node function parameters to a remote node for execution of the function on the remote node (*abstract and col.3, lines 15-51*), comprising:

- associating a representation string with function parameters on a first stack, wherein each character in the representation string corresponds to a data type of an individual function parameter on the first stack (*col.4, lines 32-65 and col.7, line 54-col.8, line 23*); and

- dereferencing pointer parameters on the first stack (*col.4, line 54-col.5, line 15*).

Leach does not explicitly teach generating a pure value buffer with the function parameters and the dereferenced pointer parameters; optimizing the pure value buffer; and transmitting the optimized pure value buffer to the remote node.

Russell teaches generating a pure value buffer with the function parameters and the dereferenced pointer parameters; optimizing the pure value buffer; and transmitting the optimized pure value buffer to the remote node (*col.12, lines 42-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the facility that invokes remote procedures while minimizing the processing overhead imposed on the system.

11. **As to claim 2**, Leach teaches associating the representation string further comprises generating a DTSTRUCT string (*col.4, lines 32-65 and col.7, line54-col.8, line 23*).

12. **As to claim 3**, Leach teaches assigning a specific text string character to each function parameter data type on the first stack, wherein the assigning is conducted by at least one of a user input and a compiler generation operation (*col.7, line54-col.8, line 23*).

13. **As to claim 4**, Leach teaches retrieving data represented by the pointer parameters (*col.7, line54-col.8, line 23*).

Leach, however, does not explicitly teach placing the data represented by the pointer parameters on the pure value buffer.

Russell teaches placing the data represented by the pointer parameters on the pure value buffer (*col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

14. **As to claim 6**, Leach does not explicitly teach eliminating remote node write only-type data from the pure value buffer.

Russell teaches eliminating remote node write only-type data from the pure value buffer prior to transmitting the pure value buffer to the remote node (*col.7, lines 18-49 and col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

15. **As to claim 7**, Leach does not explicitly eliminating local node read only-type data from the pure value buffer.

Russell teaches eliminating local node read only-type data from the pure value buffer (*col.7, lines 18-49 and col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

16. **As to claim 8**, Leach teaches generating a second stack on the second node mirroring the first stack on the first node; executing a function using the second stack (*abstract; col.3, lines 15-51; and col.5, lines 15-55*).

Leach, however, does not explicitly teach receiving the pure value buffer at the remote node; creating a return pure value buffer; and transmitting the return pure value buffer to the first node.

Russell teaches receiving the pure value buffer at the remote node; creating a return pure value buffer; and transmitting the return pure value buffer to the first node (*col. 12, line 17- col.13, line 4*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

17. **As to claim 9**, Leach teaches using the representation string to recreate the second stack (*col.3, lines 15-51; and col.5, lines 15-55*).

18. **As to claim 10**, Leach teaches receiving return pure value buffer on the first node; regenerating the first stack on the first node; and replacing each pointer that was written back in an original memory location pointed to by the first stack (*col.12, lines 17-59 and col.14, lines 10-65*).

19. **As to claim 11**, the rejection of claim 1 above is incorporated herein in full. However, claim 11 recites “eliminating second node write only-type data from the pure value buffer.”

Leach does not explicitly teach eliminating second node write only-type data from the pure value buffer node.

Russell teaches eliminating second node write only-type data from the pure value buffer node (*col.7, lines 18-49 and col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell’s teaching would have provided the capability for minimizing the transmission time of the data across the network.

20. **As to claim 12**, Leach teaches generating a stack having the function related data further comprises retrieving the function related data from various memory locations and storing the function related data in a contiguous stack location (*abstract and col.3, lines 14-51*).

21. **As to claim 13**, Leach teaches retrieving pure value data represented by the pointer parameters and storing the pure value data on the stack (*col.7, line 54-col.8, lines 23*).

22. **As to claim 14**, Leach does not explicitly teach inserting pure value data into the stack in place of the pointer parameters and copying the stack contents to the pure value buffer.

Russell teaches inserting pure value data into the stack in place of the pointer parameters and copying the stack contents to the pure value buffer (*col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

23. **As to claim 15**, refer to the discussion of claim 1 above for rejection of "optimizing the pure value buffer."

24. **As to claim 17**, refer to the discussion of claim 7 above for rejection of "eliminating first node read only-type data from the pure value buffer prior to transmitting the pure value buffer to the second node."

25. **As to claims 18-21 and 23-27**, note the rejection of claims 1-4 and 6-10 above. Claims 18-21 and 23-27 are the same as claims 1-4 and 6-10, except claims 18-21 and 23-27 are computer readable medium claims and claims 1-4 and 6-10 are method claims.

26. **As to claim 28**, the rejection of claim 11 above is incorporated herein in full. However, claim 28 recites "removing local node read only-type data from the pure value buffer."

Leach does not explicitly teach removing local node read only-type data from the pure value buffer.

Russell teaches removing local node read only-type data from the pure value buffer (*col.7, lines 18-49 and col.12, lines 54-59*).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Leach and Russell because Russell's teaching would have provided the capability for minimizing the transmission time of the data across the network.

27. As to claims 29-31 and 33-34, note the rejection of claims 12-15 and 17 above. Claims 29-31 and 33-34 are the same as claims 12-15 and 17, except claims 29-31 and 33-34 are computer readable medium claims and claims 12-15 and 17 are method claims.

Response to Arguments

28. Applicants' arguments filed December 23, 2003 have been considered but are moot in view of the new ground(s) rejection.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

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Any response to this action should be mailed to:

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450


or fax to:

(703) 746-7239 (for formal communications intended for entry)

(703) 746-7238 (for After Final communications)

(703) 746-7240 (for informal or draft communications)

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